

CLAIMS

1. System (16) for treating the exhaust gases (G) of a motor vehicle combustion engine (10), particularly a lean-burn diesel engine or petrol engine, comprising a burnt gas (G) exhaust circuit (14), of the type in which the exhaust circuit (14) comprises a burnt gas (G) ionization system (22) and an ionized air injection system (24) upstream and/or downstream of the burnt gas (G) ionization system (22), which comprises means (26) for ionizing the ambient air that convert a portion of the oxygen present in the ambient air to ozone, and of the type in which the air ionization means (26) and the burnt gas (G) ionization system (22) each consist of at least one reactor (26, 32) of the non-thermal plasma-generating discharge type, characterized in that the burnt gas (G) ionization system (22) comprises a plurality of reactors (32) arranged in series which successively ionize the burnt gases (G).
2. Treatment system (16) according to the preceding claim, characterized in that the various reactors are separate compartments of a single vessel (18).
3. Treatment system (16) according to either of the preceding claims, characterized in that the exhaust circuit (14) comprises a catalyst (20) for treating nitrogen oxides, that is positioned downstream of the ionized air injection system (24).